

REMARKS

Claims 1-5 are currently pending in the subject application. By the instant amendment, claim 3 is canceled, and the subject matter thereof is incorporated into claim 1. Also by the instant amendment, new drawing FIGS. 7 and 8 are included to replace original FIG. 7 and 8, which previously contained typographical errors. No new matter is added by the new drawings.

Applicants appreciate the Examiner's acknowledgment of Applicants' claim for foreign priority, and receipt of a certified copy of the priority document.

Applicants also appreciate the Examiner's acknowledgment of the applicants' election of Group I, claims 1-5 for prosecution in the subject application.

Claims 1, 2, 4 and 5 are presented to the Examiner for further prosecution on the merits.

A. Introduction

In the outstanding Office Action, the Examiner rejected claims 1, 2, 4 and 5 under 35 U.S.C. § 102(a) as being anticipated by United States Patent No. 5,308,682 to Morikawa ("the Morikawa reference"), and rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over the Morikawa reference in view of United States Patent No. 5,311,061 to Scheck ("the Scheck reference") and United States Patent No. 5,580,812 to Ikemasu et al. ("the Ikemasu et al. reference").

B. Asserted Rejections Under 35 U.S.C. § 102(a)

By the instant amendment, claim 1 is amended to include the subject matter of claim 3, thereby rendering moot the rejection of claim 1 under 35 U.S.C. § 102(a). Therefore, this rejection of claim 1 and claims 2, 4 and 5, which depend directly or indirectly therefrom, will be addressed with respect to the rejection of claim 3, below.

C. Asserted Rejection Under 35 U.S.C. § 103(a)

The rejection of claims 1, 2, 4 and 5 under 35 U.S.C. § 102(a) will be addressed with respect to the rejection of claim 3 under 35 U.S.C. § 103(a), as the subject matter of claim 3 has been incorporated into claim 1, and claim 3 has been canceled.

In the outstanding Office action, the Examiner correctly states that the Morikawa reference does not teach using an alignment check pattern in a memory device. The Examiner therefore looks to the Sheck reference and the Ikemasu et al. reference, which are directed to semiconductor memory devices. However, it is respectfully submitted that the combination of cited prior art references neither discloses nor suggests the present invention as recited in claim 1.

The Examiner asserts that the Sheck reference teaches using alignment keys for aligning a semiconductor substrate such as a memory device. *See the Office Action of February 2, 2004, at p. 3.*

However, unlike the present invention as claimed, the Sheck reference is directed to an alignment key used in laser repair, whereas the claimed invention is directed to a method for forming an active pattern and a word line pattern in a semiconductor device. The alignment key of the Sheck reference is a closed structure formed of two metal lines that are electrically coupled by a filled via, and is used for aligning a laser repair tool to a die so that fusible links in non-functioning primary circuitry may be destroyed, thereby allowing undamaged redundant circuitry to be activated.

The Examiner also asserts that the Ikemasu et al. reference teaches forming a gate electrode in a DRAM made of a polysilicon layer while forming an alignment mark 11c in a scribe line area. *See the Office Action of February 2, 2004, at p. 3.*

However, the Ikemasu et al. reference is directed to solving a problem that occurs when a residue of storage electrode material is deposited in a scribe line region of a chip

during formation of the storage electrode. To this end, the Ikemasu et al. reference discloses forming a belt cover film 11c for covering a scribe line region of a chip to inhibit residue 11a formed thereon from lifting off the scribe line region and freely drifting around the chip. While the belt cover film 11c of the Ikemasu et al. reference is formed during formation of the storage electrode, it is not an alignment mark as asserted by the Examiner. Rather, it is a covering formed in the vicinity of the alignment mark 26 to prevent a residue formed of storage electrode material that is formed in the vicinity of the alignment mark 26 from freely drifting around the chip. *See U.S. Patent No. 5,580,812, at col. 10, lines 4-18.*

Unlike the present invention as claimed, none of the cited prior art references, alone or combined, disclose or suggest forming a first pattern simultaneously in both a semiconductor device formation region of a semiconductor substrate and a first mark formation region of the semiconductor substrate, and forming a second pattern on a resultant structure simultaneously in both the semiconductor device formation region of the semiconductor substrate and a second mark formation region of the semiconductor substrate, wherein the first pattern is an active pattern in a DRAM cell region, and the second pattern is a word line pattern in the DRAM cell region, as substantially recited in claim 1.

Therefore, it is respectfully submitted that it would not be obvious to one of ordinary skill in the art to combine the teachings of the Sheck reference and the Ikemasu et al. reference with the teachings of the Morikawa reference, and further, that any such combination would not yield the present invention as claimed. Therefore, it is respectfully submitted that claim 1 is patentably distinct over the cited prior art references and in condition for allowance.

In addition, claims 2, 4 and 5, which depend directly or indirectly from claim 1, are believed to be similarly allowable as depending from an allowable base claim.

Accordingly, favorable reconsideration and withdrawal of the rejection of claims 1, 2, 4 and 5 are respectfully requested.

D. Conclusion

In view of the foregoing amendments and remarks, applicants respectfully submit that claims 1, 2, 4 and 5 are in condition for allowance, and a notice to such effect is respectfully requested.

Finally, if the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is respectfully requested, and an early and favorable action upon all pending claims is hereby requested.

Respectfully submitted,

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**PETITION and
DEPOSIT ACCOUNT CHARGE AUTHORIZATION**

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.